

04/08/13



Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06 Area E ICM

Accutest Job Number: JB29314R

Sampling Dates: 02/19/13 - 02/20/13

Report to:

Anderson, Mulholland & Associates

ttaylor@amaiconsult.com

ATTN: Terry Taylor

Total number of pages in report: 14



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Maney - Cole
Nancy Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, DE, FL, IL, IN, KS, KY, LA, MA, MD, MI, MT, NC, OH VAP (CL0056), PA, RI, SC, TN, VA, WV

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Sample Summary

Anderson, Mulholland & Associates

Job No: JB29314R

BMSMC, Building 5 Area, PR Project No: SM04.00.06 Area E ICM

Sample Number	Collected Date	Time By	Received	Matr Code		Client Sample ID
JB29314-1R	02/19/13	16:10 TT	02/21/13	SO	Soil	AREAEC7_BOT
JB29314-2R	02/20/13	13:00 TT	02/21/13	SO	Soil	AREAEC8_7FT
JB29314-3R	02/20/13	13:45 TT	02/21/13	SO	Soil	AREAEC8_BOT
JB29314-4R	02/20/13	13:45 TT	02/21/13	SO	Soil	AREAEC8_BOTD





CASE NARRATIVE / CONFORMANCE SUMMARY

Client: Anderson, Mulholland & Associates Job No JB29314R

Site: BMSMC, Building 5 Area, PR Report Date 4/1/2013 4:58:54 PM

On 02/21/2013, 4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a temperature of 3 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JB29314R was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GC By Method SW846-8015C (DAI)

Matrix: SO Batch ID: GGH4266

- All method blanks for this batch meet method specific criteria.
- Sample(s) JB31283-15RMS, JB31283-15RMSD were used as the QC samples indicated.
- JB29314-4R: Sample analyzed outside the holding time per client's request.
- JB29314-3R: Sample analyzed outside the holding time per client's request.
- JB29314-2R: Sample analyzed outside the holding time per client's request.
- JB29314-1R: Sample analyzed outside the holding time per client's request.

Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting Accutest's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

Accutest Laboratories is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by Accutest Laboratories indicated via signature on the report cover

Summary of Hits Job Number: JB293141

JB29314R

Account: Anderson, Mulholland & Associates BMSMC, Building 5 Area, PR 02/19/13 thru 02/20/13 **Project:**

Collected:

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JB29314-1R	AREAEC7_BOT					
Methanol ^a		32100	280	66	ug/kg	SW846-8015C (DAI)
JB29314-2R	AREAEC8_7FT					
Methanol a		43500	220	53	ug/kg	SW846-8015C (DAI)
JB29314-3R	AREAEC8_BOT					
Methanol ^a		62600	340	81	ug/kg	SW846-8015C (DAI)
JB29314-4R	AREAEC8_BOTE)				
Methanol ^a		39400	320	77	ug/kg	SW846-8015C (DAI)

⁽a) Sample analyzed outside the holding time per client's request.





Sample Results		
Report of Analysis		



Report of Analysis

Client Sample ID: AREAEC7_BOT Lab Sample ID: JB29314-1R Date Sampled: 02/19/13 SO - Soil Matrix: **Date Received:** 02/21/13 Method: SW846-8015C (DAI) **Percent Solids:** 72.7

BMSMC, Building 5 Area, PR **Project:**

File ID DF **Prep Date Analytical Batch** Analyzed By **Prep Batch XPL GGH4266** Run #1 a GH92233.D 1 03/20/13 n/a n/a Run #2

Initial Weight Run #1 5.0 g Run #2

CAS No.

Compound **MDL** Units Result RLQ

Isopropyl Alcohol 67-63-0 ND 140 64 ug/kg 67-56-1 Methanol 280 66 32100 ug/kg

CAS No. **Surrogate Recoveries** Run# 2 Run#1 Limits

111-27-3 Hexanol 87% 58-133% 111-27-3 Hexanol 70% 58-133%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



4

Report of Analysis

Client Sample ID: AREAEC8_7FT

Lab Sample ID: JB29314-2R

Matrix: SO - Soil Date Received: 02/21/13

Method: SW846-8015C (DAI) Percent Solids: 90.5

Project: BMSMC, Building 5 Area, PR

File ID DF **Prep Date Analytical Batch** Analyzed By **Prep Batch XPL GGH4266** Run #1 a GH92234.D 1 03/20/13 n/a n/a Run #2

Initial Weight Run #1 5.0 g

Run #2

CAS No. Compound **MDL** Units Result RLQ **Isopropyl Alcohol** 67-63-0 ND ug/kg 110 51 67-56-1 Methanol 43500 220 53 ug/kg CAS No. **Surrogate Recoveries** Run# 1 Run# 2 Limits 111-27-3 Hexanol 94% 58-133% 111-27-3 Hexanol 81% 58-133%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



4

Report of Analysis

Client Sample ID: AREAEC8_BOT

Lab Sample ID: JB29314-3R Date Sampled: 02/20/13

Matrix: SO - Soil Date Received: 02/21/13

Method: SW846-8015C (DAI) Percent Solids: 59.1

Project: BMSMC, Building 5 Area, PR

File ID DF **Prep Date Analytical Batch** Analyzed By **Prep Batch XPL GGH4266** Run #1 a GH92235.D 1 03/20/13 n/a n/a Run #2

Initial Weight
Run #1 5.0 g
Run #2

CAS No. Compound **MDL** Units Result RLQ **Isopropyl Alcohol** 67-63-0 ND 170 **79** ug/kg 67-56-1 Methanol 62600 81 340 ug/kg CAS No. **Surrogate Recoveries** Run# 2 Run#1 Limits 111-27-3 Hexanol 97% 58-133% 111-27-3 Hexanol 80% 58-133%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Report of Analysis

Client Sample ID: AREAEC8_BOTD Lab Sample ID: JB29314-4R

 Lab Sample ID:
 JB29314-4R
 Date Sampled:
 02/20/13

 Matrix:
 SO - Soil
 Date Received:
 02/21/13

 Method:
 SW846-8015C (DAI)
 Percent Solids:
 57.6

Project: BMSMC, Building 5 Area, PR

File ID DF Analyzed By Prep Date Prep Batch Analytical Batch Run #1 a GH92236.D 1 03/20/13 XPL n/a n/a GGH4266

Run #2

Initial Weight

Run #1 5.4 g

Run #2

CAS No. Compound Result RL MDL Units Q

67-63-0 Isopropyl Alcohol ND 160 75 ug/kg 67-56-1 Methanol 39400 320 77 ug/kg

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

 111-27-3
 Hexanol
 93%
 58-133%

 111-27-3
 Hexanol
 89%
 58-133%

(a) Sample analyzed outside the holding time per client's request.

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





Misc. Forms	
Custody Documents and Other Forms	

Includes the following where applicable:

• Chain of Custody



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CHAIN OF CUSTODY

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White Planns WY 10	Zip 604	City				State								STARS [] MTBE	PPL□ STARS□ PADF□ +TICs□									SO - Soil
Project Contact T. Taylor Haylor emaiconsu		Project #											602 🗆	PPL 0 s	0 5	الما عصم					l	- 1		SL - Sludge
T. Taylor Hayloreamaiconsu	1+.00	Fax#											1-0	E +		싱					- 1		- 1	O1 - Oil
riione # *		rax#											8021 D	101-	TCL D	S	·				- 1			LIQ - Other Liquid
Sampler's Name		Client Purc	hase Orde	er#			-			-	***************************************		624 C			10					- 1	- 1		AIR - Air
						,,								624 🗆	625 🗆 BN 🗀	্যু							- 1	SOL - Other Solid
Accutest Field ID / Point of Collection Sample #	SUMMA#	- Co	llection				T	Number	7	7			8 X	8260 🗆	00	BIG	- 1						1	WP - Wipe
Sample # N	EOH Vial#	Date	Time	Sampled By	Matrix	# of bottles	2	HN03	H2S04	MONE	NaHSO	MEOH	826 BTE	826 TB/	827 ABI	8								LAB USE ONLY
-/ AREAEC7_BOT P	2	/19/13	1610		So	4	П	T	Π	П		T				X						T		M33TI
-2 AREAECS_7FT	2/3	5	1300		So	4										X								1403
3 AREAECS_BOT	2/	2413	1345		50	4										X								4905
4 AREAECS_BOTD 4	-	20/13			SO	4			Т	П			T			X								
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Turnaround Time (Business Days)						Data De	liverah	le Inform	nation	Щ			J	1					ommen	ts / Rem	arks	1		
Std. 15 Business Days Approved By: / Date:		To	Commerc	ial "A"	···			FULL CL						T	-, 7	-					/_ /	/		
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JB29314R: Chain of Custody Page 1 of 3





Accutest Laboratories Sample Receipt Summary

ACCUTEST

Accutest Job Number: JB29	9314		Client:				Project:			
Date / Time Received: 2/21	/2013			Delivery N	/lethod:		Airbill #'s:			
Cooler Temps (Initial/Adjuste	ed): <u>#</u> 1	1: (3/3); ()							
Cooler Security Y 1. Custody Seals Present: ✓ 2. Custody Seals Intact: ✓	or N] 3.	COC Pre	esent: :/Time OK	Y or	N	Sample Integrity - Documentation 1. Sample labels present on bottles: 2. Container labeling complete:	<u>Y</u>	or N	
Cooler Temperature 1. Temp criteria achieved: 2. Cooler temp verification: 3. Cooler media: 4. No. Coolers:	✓ Ba	or N ar Therm be (Bag)					3. Sample container label / COC agree: Sample Integrity - Condition 1. Sample recvd within HT: 2. All containers accounted for: 3. Condition of sample:	Y Y V	or N	
Quality Control Preservation 1. Trip Blank present / cooler: 2. Trip Blank listed on COC: 3. Samples preserved properly: 4. VOCs headspace free:	<u>Y</u> □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	or N	N/A V				Sample Integrity - Instructions 1. Analysis requested is clear: 2. Bottles received for unspecified tests 3. Sufficient volume recvd for analysis: 4. Compositing instructions clear: 5. Filtering instructions clear:	Y V 	or N	N/A V
Comments							, ·			
Accutest Laboratories V:732.329.0200							Highway 130 2.329.3499			Dayton, New Jersey www/accutest.com

JB29314R: Chain of Custody

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To Client: This Change Order is confirmation of the revisions, previously discussed with the Accutest Client Service

Terry Taylor

Above Changes Per:

Date: 3/15/2013

Requested Date:	.e: 3/15/2013	Received Date: 2//	2/21/2013
Account Name:	:: Anderson, Mulholland &	Due Date: 3/	3/7/2013
Project	BMSMC, Building 5 Area, PR	Deliverable:	FULT1
CSR:	michello	TAT (Days):	14
Sample #: Dept: Dept:		Change: Please relog for D8015IPA & DGC+METH. OK to run out of hold time.	ETH. OK to

JB29314R: Chain of Custody Page 3 of 3